

We claim:

Sub 1
A non-lethal, mutant seed of a cereal plant species having at least 5% by weight oil, at least 11% by weight protein, and at least a one third reduction in the phytic acid amount relative to wild-type seed of said species.

Sub 2
2. A seed according to claim 1 having at least 5% oil and at least 13% protein and said reduction in the amount of phytic acid is at least half relative to wild-type seed of said species.

3. A feed comprising a seed according to claim 1, and at least one source of vitamins or minerals; said feed providing a nutritionally balanced diet and a greater amount of phosphorus to an animal consuming said feed than does the same feed formed with wild-type seed of said species.

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4. A feed comprising a seed according to claim 2, and at least one source of vitamins or minerals; said feed providing a nutritionally balanced diet and a greater amount of phosphorus to an animal consuming said feed than does the same feed formed with wild-type seed of said species.

5. A feed according to claim 3 wherein the vitamins and mineral source includes calcium, phosphorus and salt.

6. A feed according to claim 3 wherein the vitamins and mineral source includes at least one of vitamin A and vitamin D.

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7. A feed according to claim 3 wherein the vitamins and mineral source includes vitamins selected from the group comprised of: vitamin E, B₁₂, riboflavin, pantothenic acid, niacin, biotin.
8. A feed according to claim 3 wherein the vitamins and mineral source includes trace mineral selected from the group comprised of: iron, copper, manganese, zinc, iodine, selenium.
9. A feed according to claim 3, further comprising feed additives selected from the group comprising: antibiotics, arsenicals, chemotherapeutics, flavoring, antioxidants and plant extracts.
10. A feed according to claim 3 wherein the feed is supplemented with the amino acid lysine. A
11. A feed according to claim 3 wherein the feed is supplemented with the amino acid is methionine.
12. A feed according to claim 3 wherein the components are formulated for the dietary requirements of swine.
13. A feed according to claim 3 wherein the components are formulated for the dietary requirements of poultry.
14. A seed according to claim 1 selected from the group consisting of maize seed, rice seed, soy seed and barley seed.

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~~15.~~ A method of increasing bioavailability of phosphorus from products containing wild-type seed of a species, said method comprising the steps of providing a seed containing product for consumption, wherein said seed containing product comprises a seed of claim 1, feeding said seed containing product to an animal which will benefit from an increased bioavailability of phosphorus.

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16. Germplasm which will yield the corn grain of claim 1.

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17. A plant produced from a seed according to claim 1.

18. A seed according to claim 1 wherein said seed is fully mature.

~~19.~~ Inbred line UO95py

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~~20.~~ A hybrid formed from crossing inbred UO95py with an inbred corn line.

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21. A seed according to claim 1 having at least 6% oil and at least 9% protein and said reduction in the amount of phytic acid is at least half relative to wild-type seed of said species.

~~22.~~ A non-lethal, mutant seed of a cereal plant species having at least 5% by weight oil and at least a one third reduction in the phytic acid amount relative to wild-type seed of said species.

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23. A seed according to claim 1 having at least 6% oil and at least 9% protein and said reduction in the amount of phytic acid is at least half relative to wild-type seed of said species.

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